

**Abstract**

- System and method for automated experience rating and/or loss reserving for events, a certain event  $P_{i,f}$  of an initial year  $i$  including development values  $P_{ikf}$  with development year  $k$ . For  $i, k$  applicable is  $i=1,..,K$  and  $k=1,..,K$ ,  $K$  being the last known development year, and the first initial year  $i=1$  comprising all development values  $P_{1kf}$  in a specified way. To determine the development values  $P_{i,K-(i-j)+1,f}$  neural networks  $N_{i,j}$  are generated iteratively for each initial year  $i$  ( $i-1$ ), whereby  $j=1,..,(i-1)$  are the number of iterations for a particular initial year  $i$  and whereby the neural network  $N_{i,j+1}$  depends recursively on the neural network  $N_{i,j}$ . In particular the system and method is suitable for experience rating for insurance contracts and/or excess of loss reinsurance contracts.

(Figure 5)